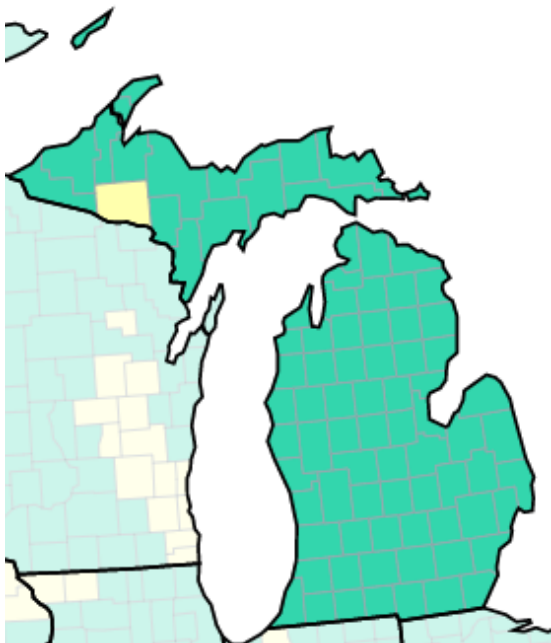




MI COVID RESPONSE DATA AND MODELING UPDATE

February 14, 2023

As of Feb 9, no Michigan Counties are at High COVID-19 Community Level



- In the US, 2% of counties have high risk for medically significant disease and healthcare strain
- In Michigan, 0% (0/83) of counties are at high risk. This represents 0% of the population
- 1 Michigan county is currently at Medium level (1%). This represents less than 1% of the population
- 82 Michigan counties are currently at Low level (99%). This represents nearly 100% of the population

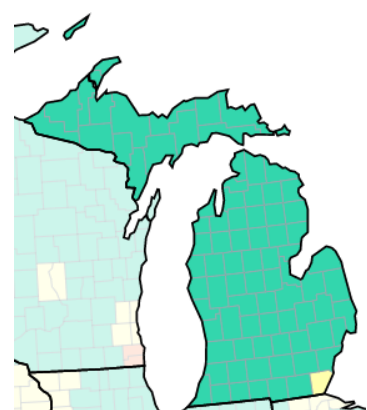
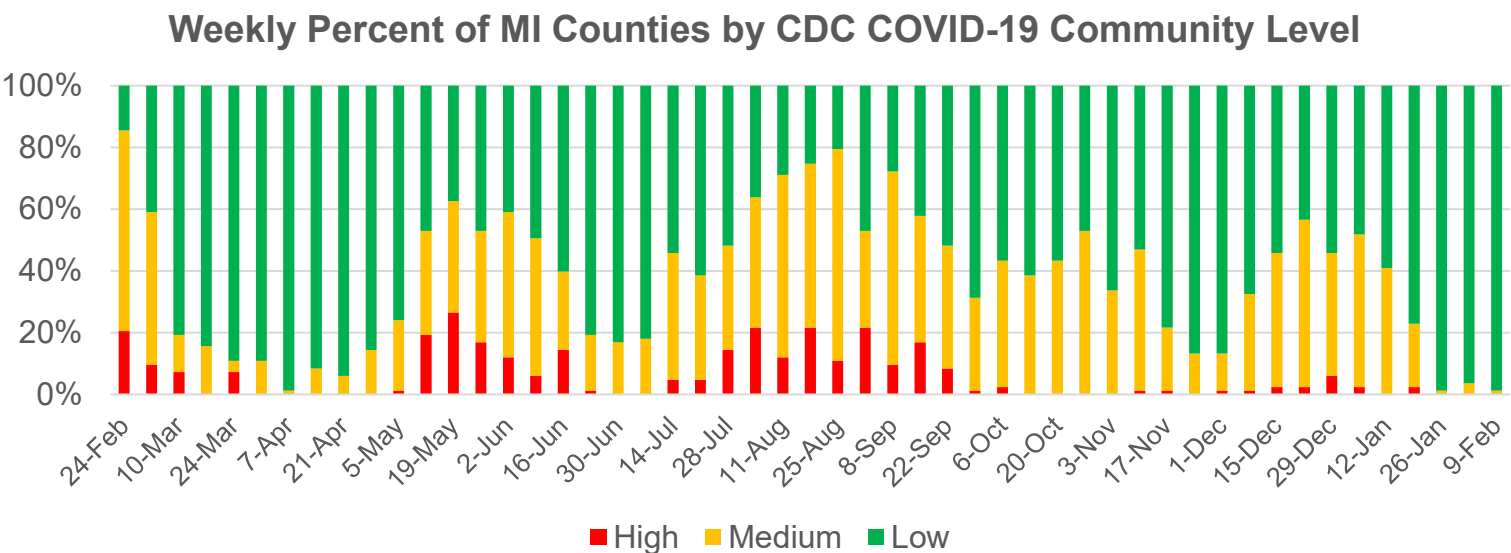
Percent of Counties This Week

	United States	Michigan	Percent of MI Population
Low	77%	99%	100%
Medium	21%	1%	<1%
High	2%	0%	0%

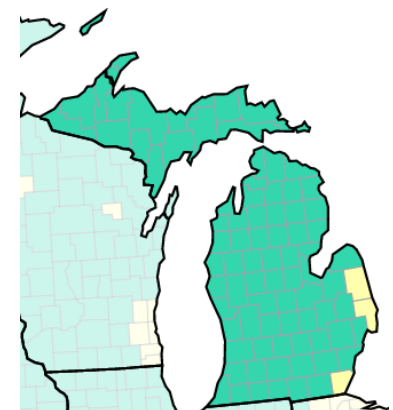
Low	Medium	High
<ul style="list-style-type: none">• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms	<ul style="list-style-type: none">• If you are at high risk for severe illness, talk to your healthcare provider about whether you need to wear a mask and take other precautions• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms	<ul style="list-style-type: none">• Wear a mask indoors in public• Stay up to date with COVID-19 vaccines• Get tested if you have symptoms• Additional precautions may be needed for people at high risk for severe illness

Michigan Trends of COVID-19 Community Levels

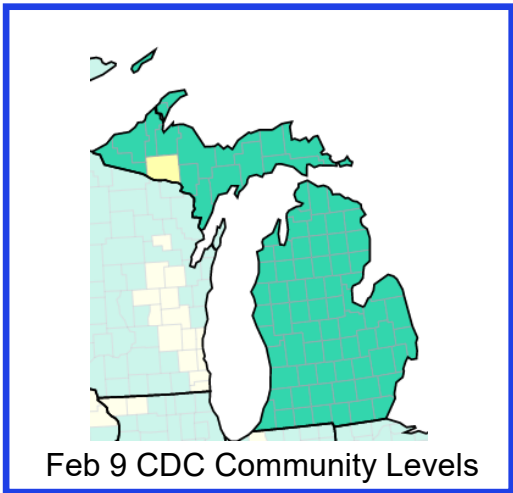
- As of Feb 2, no (0%) Michigan counties are at high COVID-19 community level and only 1 Michigan county is currently at Medium level (1%). Together, these counties account for <1% of the population.
- The proportion of Michigan counties at medium and high is roughly similar to the past 2 weeks
- The past 3 weeks have seen the longest streak of consecutive weeks with counties at low level over the past year



Jan 26 CDC Community Levels



Feb 2 CDC Community Levels



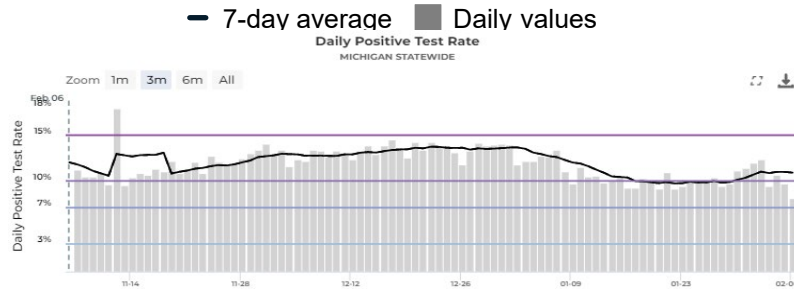
Feb 9 CDC Community Levels

This metric uses three indicators for categorization: (1) new COVID-19 cases per 100,000 population in the last 7 days lagged 1 day behind the date the COVID-19 Community Level is calculated; (2) new COVID-19 hospital admissions per 100,000 population in the last 7 days; and (3) percent of staffed inpatient beds occupied by patients with confirmed COVID-19 (7-day average) lagged 1 day behind the 7-day case rate .

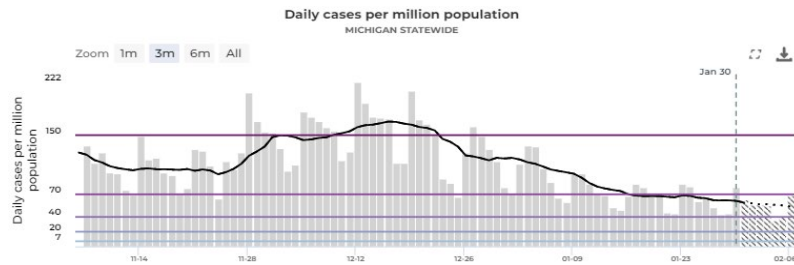
Recent statewide COVID trends are plateaued

Statewide trends

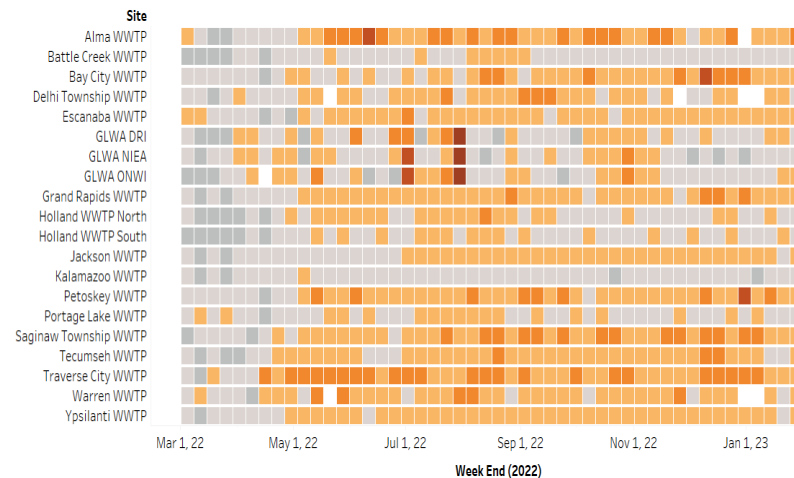
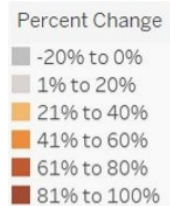
Positivity, %



Daily cases per million



Wastewater



Current: 60% of sites
are above 20%
baseline threshold

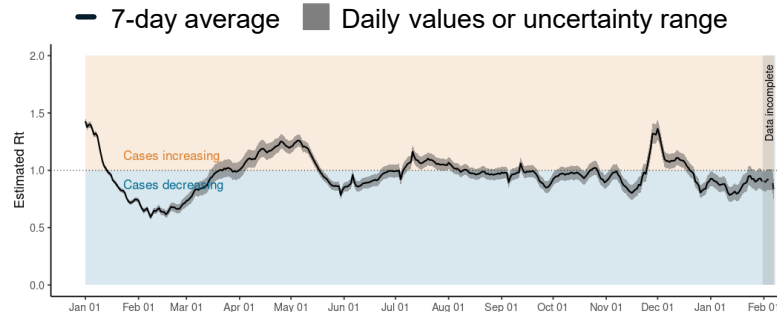
Last Week: 55% of
sites are above 20%
baseline threshold

- Test percent positivity, is steady compared to last week
- Case rates steady since last week, and the general trend the past several weeks is declining
- Five counties are currently showing an increase in cases and an additional 5 reported an elevated incidence plateau in case rates (via mistartmap.info as of 2/9/23, data through 1/30/23)
- 60% (12/20) of wastewater sentinel sites have reported levels that are 20% or higher than baseline threshold levels this week

Recent statewide COVID trends are plateaued

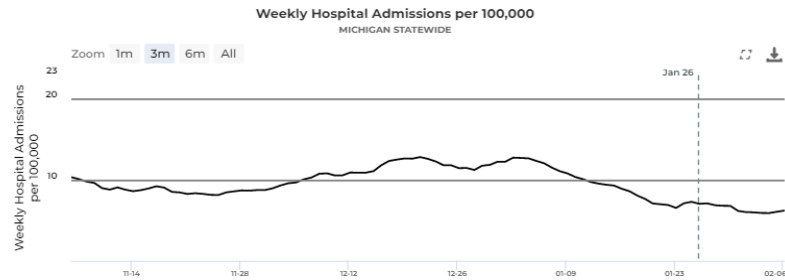
Statewide trends

Reproductive Number, R_t



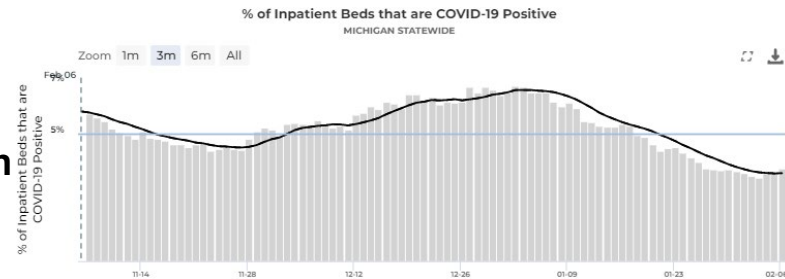
Current: 0.90
Last Week: 0.91

Hospital Admissions



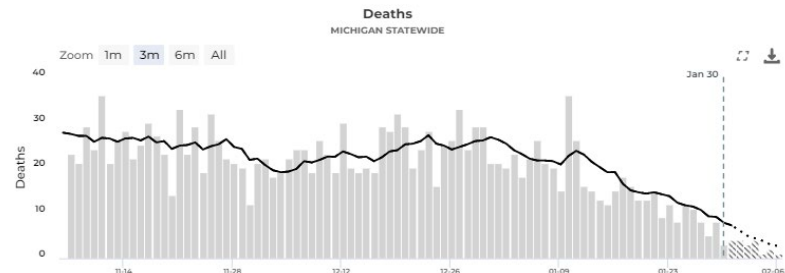
Current: 6.2
Last Week: 6.8

Daily hospitalization rate, %



Current: 3.5%
Last Week: 3.7%

Deaths

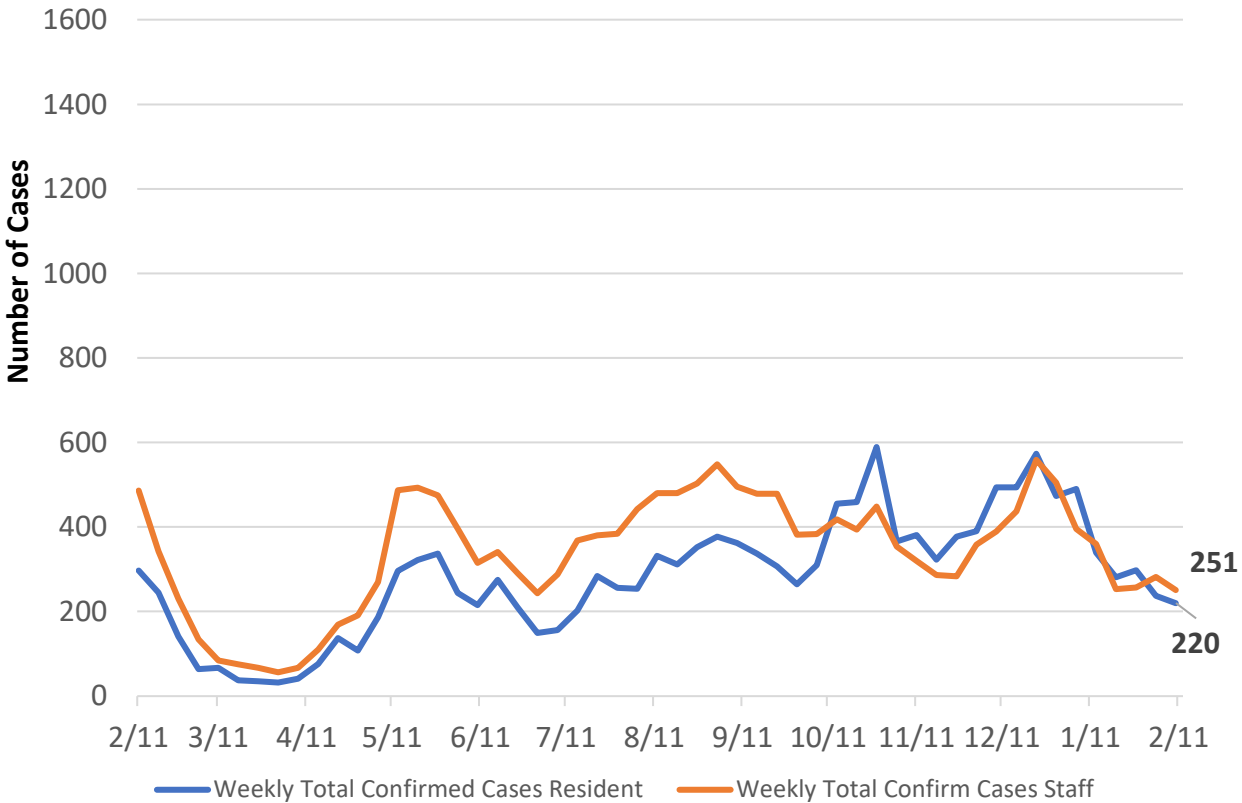


Current: 0.7
Last Week: 0.7

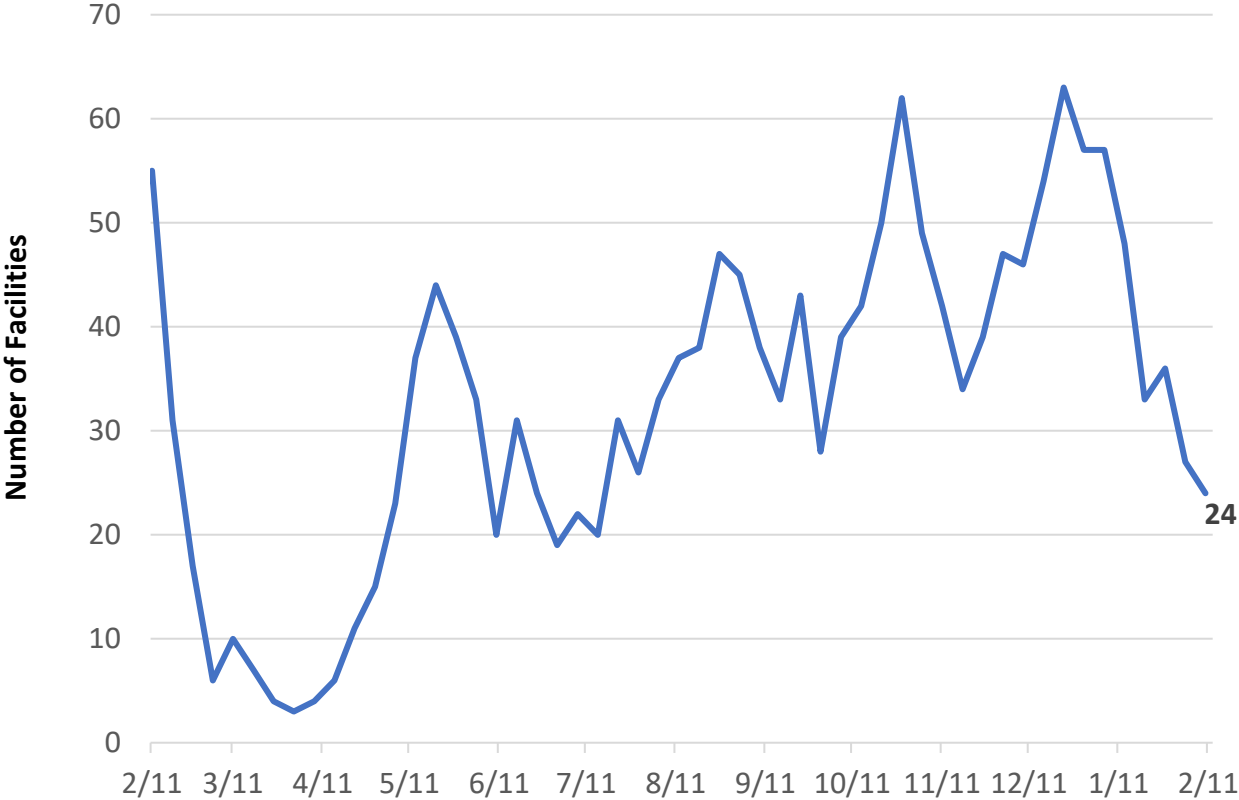
- The reproductive number (R_t) in Michigan is just below 1 indicating slight decline
- There are an average of 6.2 hospital admissions per 100,000 Michiganders day which is slightly decreased from last week
- The percent of inpatient beds that have patients diagnosed with COVID-19 have seen a decrease from the past week
- Deaths are a lagging indicator but are plateaued over the past several months

COVID-19 Cases Among Staff and Residents in Long Term Care Facilities

STATE OF MICHIGAN WEEKLY TOTAL CONFIRMED COVID-19 CASES IN SNF
RESIDENTS AND STAFF
02/11/2022 TO 02/10/2023



Number of SNFs with 3 or more Confirmed Cases
02/11/2022 TO 02/10/2023

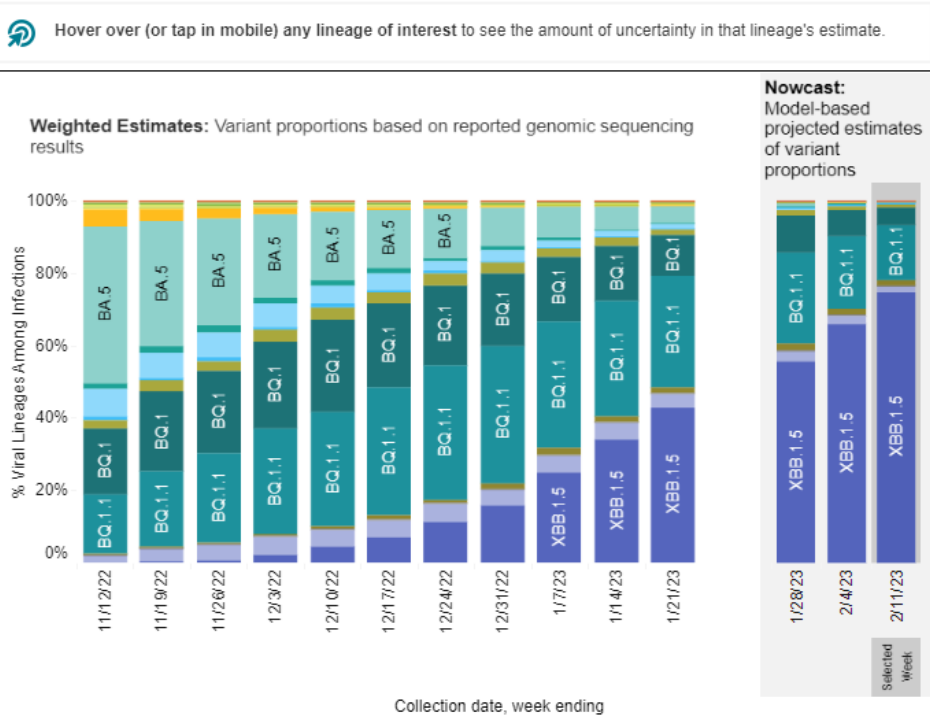


- Case counts have decreased in SNF residents (237 to 220) and in SNF staff (282 to 251) since last week [left graph]
 - The number of SNF facilities reporting 3 or more cases decreased since last week (27 to 24) [right graph]
 - Currently, **27%** of SNFs are reporting **nursing shortages** and **29%** of SNFs are reporting **aide shortages**, which is plateaued since end of July
- Abbreviations: AFC: Adult Foster Care; HFAs: Homes for the Aged; and SNF: Skilled Nursing Facilities

The data is from weekly reporting by facilities with bed occupancy of at least 13 beds.

Identified COVID-19 Cases Caused by Variants of Concern (VOC) in US and Michigan: XBB.1.5 sublineage increasing the fastest SARS-CoV-2 Variants Circulating in the United States, Nov 6 – Feb 11 (NOWCAST)

Weighted and Nowcast Estimates in United States for Weeks of 11/6/2022 – 2/11/2023



* Enumerated lineages are US VOC and lineages circulating above 1% nationally in at least one week period. "Other" represents the aggregation of lineages which are circulating <1% nationally during all weeks displayed.

BA.1, BA.3 and their sublineages (except BA.1.1 and its sublineages) are aggregated with B.1.1.529. Except BA.2.12.1, BA.2.75, XBB and their sublineages, BA.2 sublineages are aggregated with BA.2. Except BA.2.75.2, CH.1.1 and BN.1, BA.2.75 sublineages are aggregated with BA.2.75. Except BA.4.6, sublineages of BA.4 are aggregated to BA.4. Except BF.7, BF.11, BA.5.2.6, BQ.1 and BQ.1.1, sublineages of BA.5 are aggregated to BA.5. Except XBB.1.5, sublineages of XBB are aggregated to XBB. For all the other lineages listed, their sublineages are aggregated to the listed parental lineages respectively. Previously, CH.1.1 was aggregated to BA.2.75. Lineages BA.2.75.2, XBB, XBB.1.5, BN.1, BA.4.6, BF.7, BF.11, BA.5.2.6 and BQ.1.1 contain the spike substitution R346T.

Nowcast Estimates in United States for 2/5/2023 – 2/11/2023

USA				
WHO label	Lineage #	US Class	%Total	95%PI
Omicron	XBB.1.5	VOC	74.7%	67.0-81.2%
	BQ.1.1	VOC	15.3%	11.4-20.2%
	BQ.1	VOC	5.1%	3.7-6.8%
	XBB	VOC	1.9%	1.4-2.5%
	CH.1.1	VOC	1.3%	0.9-1.9%
	BN.1	VOC	0.8%	0.5-1.1%
	BA.5	VOC	0.3%	0.2-0.5%
	BF.7	VOC	0.3%	0.2-0.4%
	BA.5.2.6	VOC	0.1%	0.1-0.2%
	BA.2	VOC	0.1%	0.0-0.1%
	BF.11	VOC	0.0%	0.0-0.1%
	BA.2.75	VOC	0.0%	0.0-0.0%
	BA.2.75.2	VOC	0.0%	0.0-0.0%
	BA.4.6	VOC	0.0%	0.0-0.0%
Delta	B.1.1.529	VOC	0.0%	0.0-0.0%
	BA.2.12.1	VOC	0.0%	0.0-0.0%
	BA.4	VOC	0.0%	0.0-0.0%
	BA.1.1	VOC	0.0%	0.0-0.0%
	B.1.617.2	VBM	0.0%	0.0-0.0%
	Other		0.1%	0.0-0.1%
	Other*			

National Distribution

- 100% of the VOCs currently circulating in the U.S. are Omicron
- Nowcast estimates project that BA.2 recombinant sublineage XBB.1.5 (74.7%, 95% P.I. 67.0-81.2%), as well as the BA.5 sublineages of BQ.1.1 (15.3%, 95% P.I. 11.4-20.2%), and BQ.1 (5.1%, 95% P.I. 3.7-6.8%) are most prevalent lineages during the week ending on **February 11**

Distribution in Michigan

- Since January 1, there have been 971 VOC specimens sequenced and reported to MDHHS
- 100% of specimens sequenced are Omicron
 - Since January 1, 75.8% of specimens sequenced and reported (n=736) have been identified as BA.5; of which 5.4% of those specimens are BF.7 (n=40), 22.4% have been identified as BQ.1 (n=165), and 57.7% as BQ.1.1 (n=425)
- 157 cases of XBB.1.5 have been identified in Michigan and has been detected in 7 of the 8 preparedness regions

95% P.I. = 95% prediction interval

Data last updated February 14, 2023

Source: CDC COVID Data Tracker: Genomic Surveillance and Michigan's MDSS; sequence data may take up to four weeks to process and get reported back to health departments

Over 6.2 Million Michiganders have completed the primary series – 62.3% of the total population

Vaccination Coverage

Over 6.2 million people in MI have completed the primary series*

91.4% of people aged 65 and older in MI have completed the primary series*

69.4% of the total MI population have initiated the primary series*

Race/Ethnicity¶ for those 6 months and older:

- Up-to-date coverage is highest among those of Non-Hispanic (NH) White (15.4%), then NH Asian, Native Hawaiian or Pacific Islander Race (14.1%), then NH American Indian (11.7%), NH Black or African American Races (8.2%).
- Up-to-date coverage is at 9.7% for Hispanics

Updated Booster Coverage

The percentage of Michiganders who have received the updated (bivalent) booster is higher than national percentages overall and for all reported age groups

44.6% of the population 65 years of age or older has received an updated (bivalent) booster

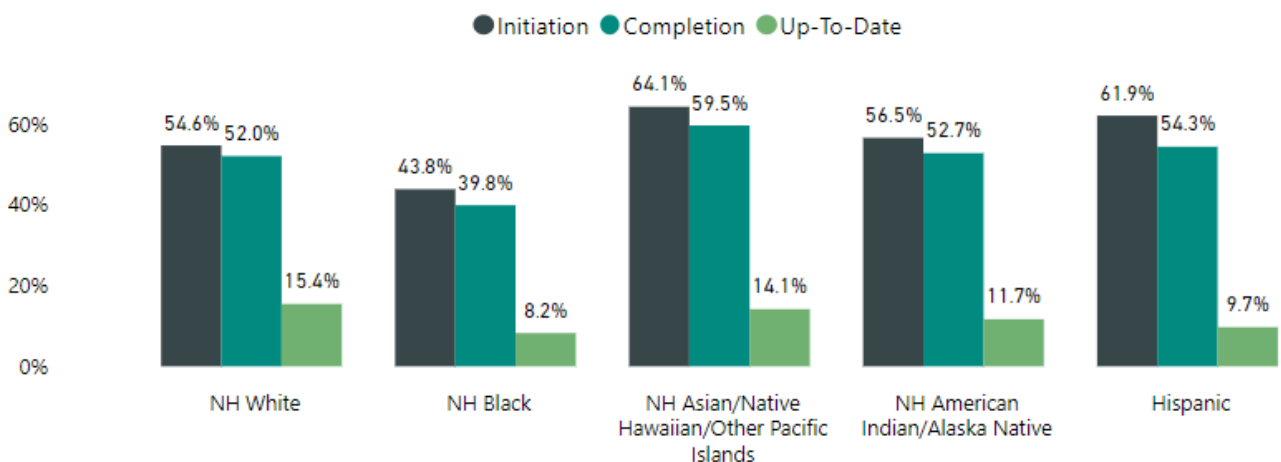
16.9% of all Michiganders have received their updated (bivalent) booster dose

Vaccination Coverage in Michigan as of 2/8/2023

Age Group	% At Least One Dose	% Completed Primary Series	% Updated Booster**	U.S. % Boosted**	Primary Series Total
Total Population	69.4%	62.3%	16.9%	15.8%	6,221,496
≥ 5 years	73.3%	65.9%	17.9%	16.8%	6,207,257
≥ 12 years	77.2%	69.5%	19.2%	18.1%	5,972,199
≥ 18 years	79.5%	71.5%	20.4%	19.2%	5,604,352
≥ 65 years	95.0%	91.4%	44.6%	40.8%	1,612,766

**This shows the percentage of all residents ages 5 years and older in a jurisdiction (state, territory, national) with an updated (bivalent) booster dose. Non-residents who received vaccine are attributed to their jurisdiction of residence.

Coverage by Race*

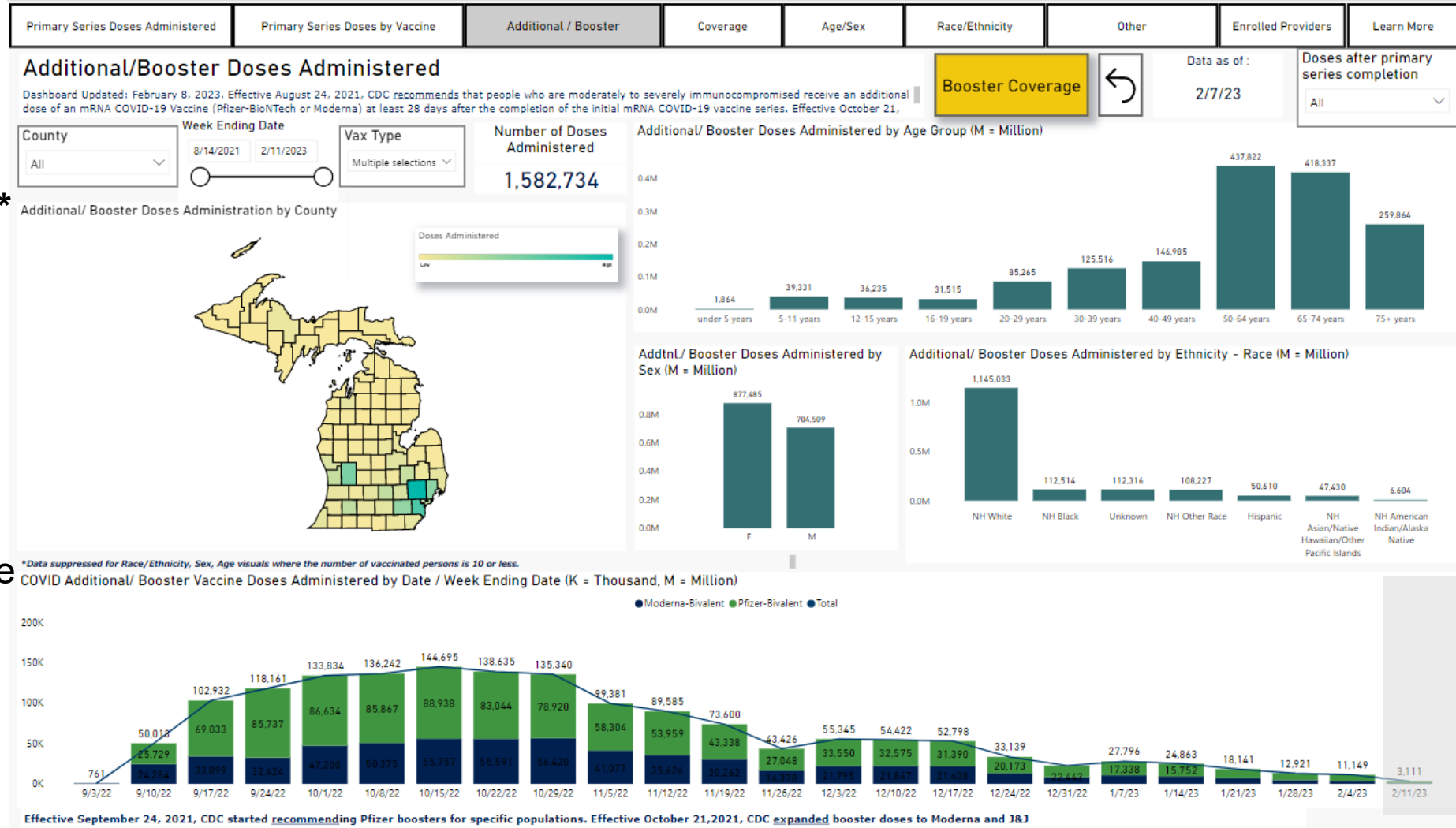


Bivalent Administration

- FDA has authorized and CDC recommends the updated bivalent COVID-19 vaccines to everyone over the age of 6 months.*

- As of 2/7[†], 1,582,734 Michiganders had received their bivalent booster

- Note: the data for the week ending 2/11 would have been incomplete on the date the dashboard was last refreshed (2/7)



● Moderna Bivalent

● Pfizer Bivalent

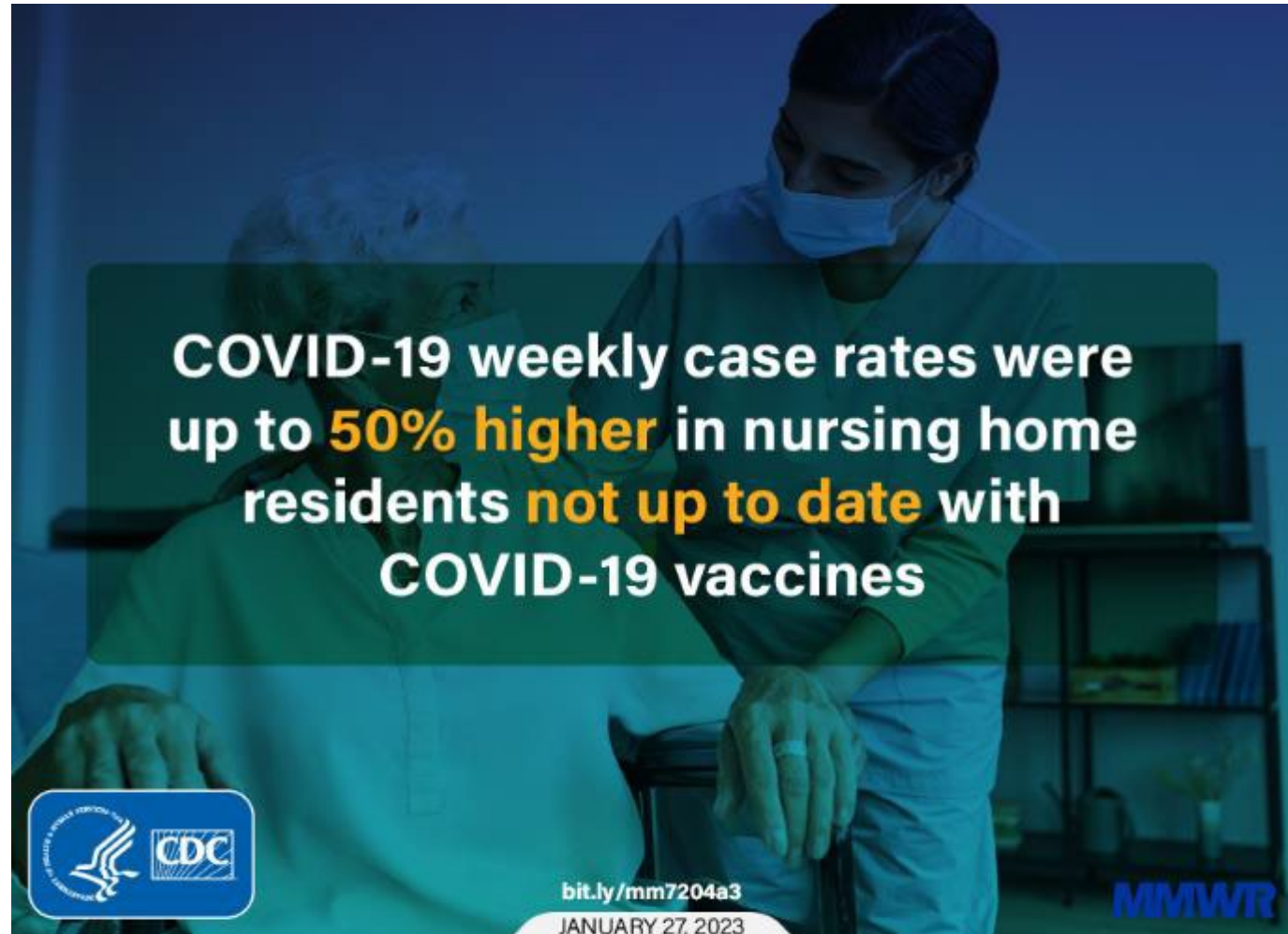
* [CDC Expands Updated COVID-19 Vaccines to Include Children Ages 6 Months through 5 Years](#)

[†] These data are updated every Wednesday on our COVID-19 vaccination Dashboard under Additional/Booster Administration Trends and then restricting the view to just Moderna and Pfizer bivalent doses

Sources: [Michigan Coronavirus Vaccine Dashboard](#)

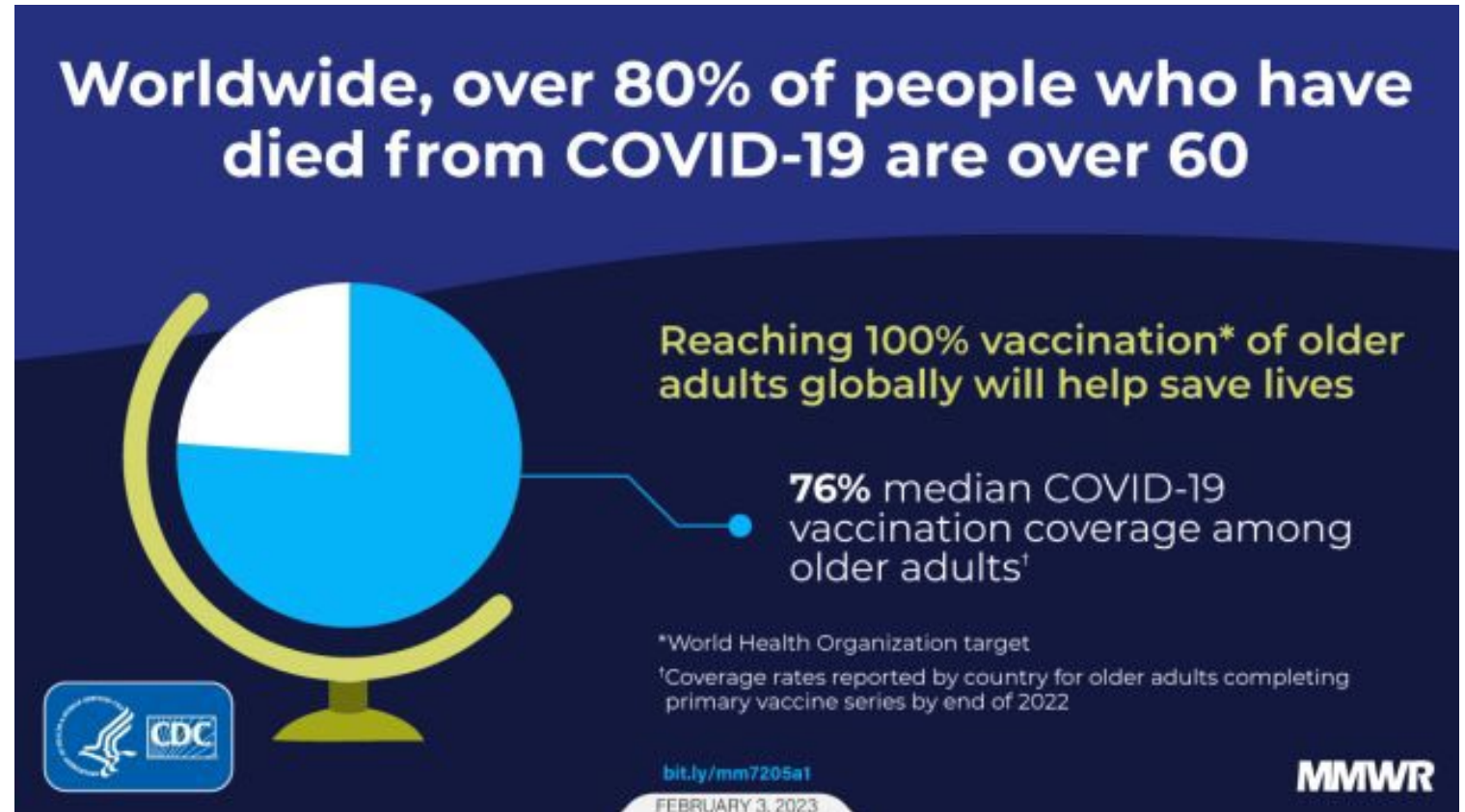
Laboratory-Confirmed COVID-19 Case Incidence Rates Among Residents in Nursing Homes Were Lower Among Those Who Were Up-To-Date on Their COVID Vaccines

- COVID-19 vaccines are effective against SARS-CoV-2 infection including for nursing home residents
- Nursing home residents who were not up to date with recommended COVID-19 vaccines had a 30%–50% higher risk for acquiring SARS-CoV-2 infection compared with residents who were up to date with COVID-19 vaccines
- The bivalent booster dose offers additional protection in persons who previously received monovalent vaccines
- Nursing home residents can maximize protection against COVID-19 by receiving bivalent COVID-19 booster doses to stay up to date with recommended COVID-19 vaccinations



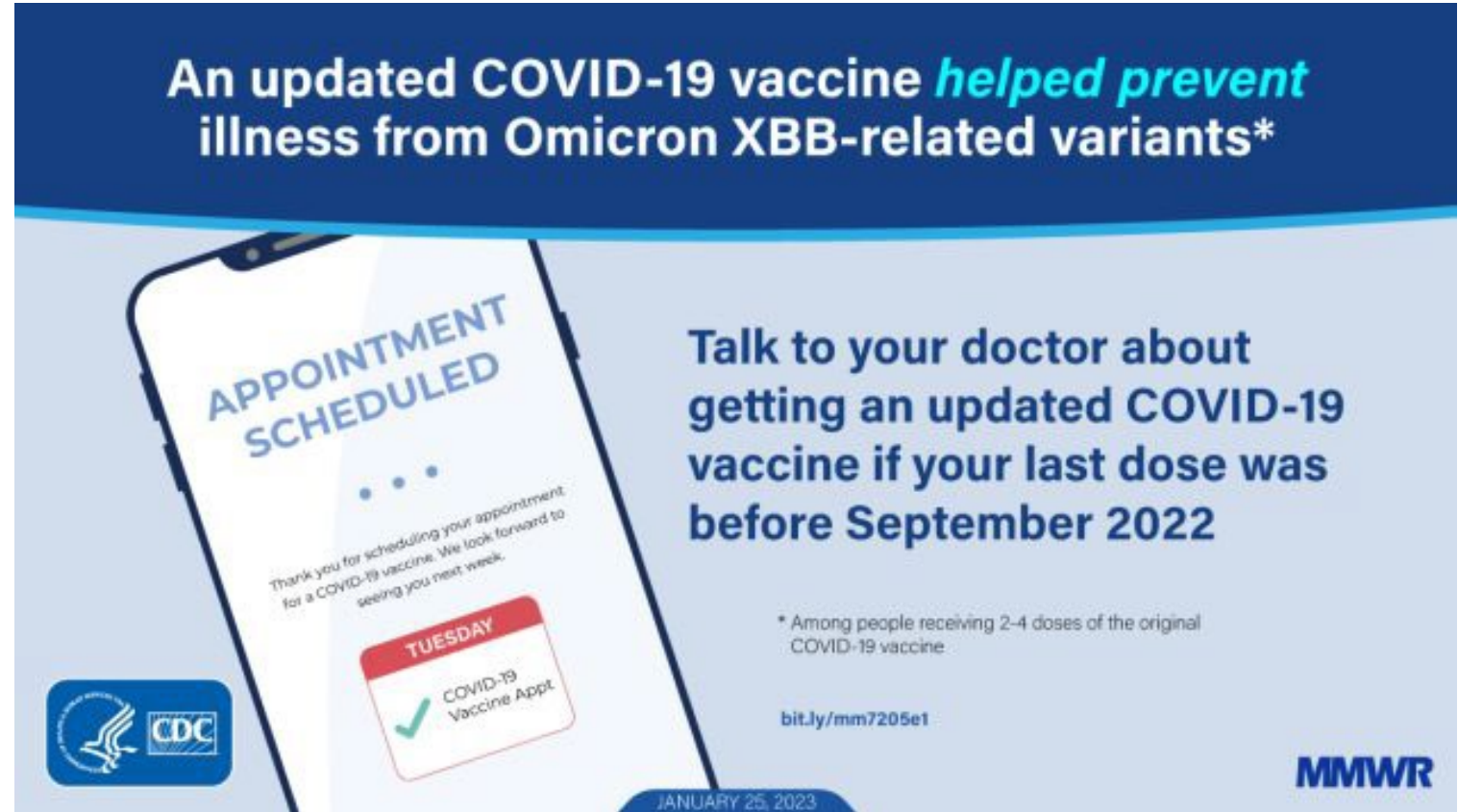
COVID-19 Primary Series and Periodic Booster Dose Coverage Among Older Adults Remains Key in the Pandemic Response

- COVID-19 vaccines are safe and reduce COVID-19 mortality
- The World Health Organization (WHO) recommends that countries prioritize populations at increased risk, e.g., older adults, for COVID-19 vaccination with a goal of 100% coverage with a completed primary series for populations at-risk
- COVID-19–associated mortality among persons aged ≥ 60 years exceeded 80% of total COVID-19 mortality in 2020 and 2021 across all income groups
- Meanwhile, the median reported completed primary series coverage among older adults in 2022 was 76%, substantially below the WHO goal, especially in middle- and low-income countries
- Efforts are needed to increase COVID-19 primary series and periodic booster dose coverage among older adults as recommended by WHO and national health authorities



Bivalent mRNA Booster Dose Provide Additional Protection Against Symptomatic XBB/XBB.1.5 Infection

- The SARS-CoV-2 Omicron BA.2-related sublineage XBB.1.5 is currently gaining predominance nationwide
- Using spike (S)-gene target presence as a proxy for BA.2 sublineages, including XBB and XBB.1.5, during December 2022–January 2023, the results showed that a bivalent mRNA booster dose provided additional protection against symptomatic XBB/XBB.1.5 infection for at least the first 3 months after vaccination in persons who had previously received 2–4 monovalent vaccine doses
- As new SARS-CoV-2 variants emerge, continued vaccine effectiveness monitoring is important
- All persons should stay up to date with recommend COVID-19 vaccines, including receiving a bivalent booster dose when eligible




Information for Persons Who Are Immunocompromised Regarding Prevention and Treatment of SARS-CoV-2 Infection in the Context of Currently Circulating Omicron Sublineages — United States, January 2023

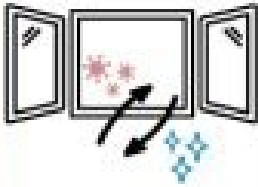
If you have a weakened immune system or live with someone who does, create a COVID-19 action plan

Prevention Measures:


Get an updated COVID-19 vaccine




Improve ventilation and spend time outdoors when possible




Learn about testing locations and treatment options **before** getting exposed or sick




Get tested if you've been exposed or have symptoms*




Wash your hands often



Wear a well-fitting respirator or mask and maintain distance in crowded spaces






*Talk to your doctor about treatment options if you test positive

bit.ly/mm7205e3

JANUARY 27, 2023



Source: Patel P, Twentyman E, Koumans E, et al. Information for Persons Who Are Immunocompromised Regarding Prevention and Treatment of SARS-CoV-2 Infection in the Context of Currently Circulating Omicron Sublineages — United States, January 2023. MMWR Morb Mortal Wkly Rep 2023;72:128–131. DOI: <http://dx.doi.org/10.15585/mmwr.mm7205e3>